

Patent claims

1. Tool head for chip metal working machining with a cutting insert (3), comprising a basic holder (1) and an insert holder (4) connected therewith the front portion of which is provided with an insert pocket located between a lower support portion (6) and an upper clamp portion (5) wherein said upper clamp portion (5) is actuatable by a press device into clamping surface engagement with the cutting insert (3) whereby the tool is provided with a slot (20) spaced from the insert pocket, **c h a r a c t e r i z e d** in that the pressing device is in the shape of a clamp screw (19) having a conical head (18) received in a recess in the basic holder (1) and arranged to exercise a movement axially such that its conical head is inserted into said slot (20) and upon tightening provides such outward bending of the upper portion of the holder so that, due to its movement, a clamping of the insert is accomplished.
2. Tool head according to claim 1, **c h a r a c t e r i z e d** in that the basic holder (1) has a larger width than the insert holder (4) and that both are provided integrally in one piece.
3. Tool head according to claim 1 or 2, **c h a r a c t e r i z e d** in that the nut roll (11a) provided for the receipt of the clamp screw (19) is received in a cylindrical recess (10a) oriented perpendicularly in relation to the longitudinal direction of the insert (3) and the insert slot (7).
4. Tool head according to any of the claims 1-3, **c h a r a c t e r i z e d** in that the screw-receiving recess (15) has a longitudinal extension at an angle oriented at an angle of 35-90° from the longitudinal direction of the insert pocket.
5. Tool head according to any of the claims 1-4, **c h a r a c t e r i z e d** in that the insert receiving slot (7) in the rearward direction extends into a slot extension (9) with a smaller height than the forward slot (7).
6. Tool head according to any of the claims 1-5, **c h a r a c t e r i z e d** in that the rear insert end surface (3a) is arranged to axially abut against a support surface (8) in the holder (4) which preferably extends essentially perpendicularly in relation to the underneath surface (3b) of the insert.
7. Tool head according to any of the claims 1-6, **c h a r a c t e r i z e d** in that the longitudinal extension of the insert (3) is longer than the longitudinal extent of the lower support surface (4a) in the insert holder thus providing a side support for the insert from one side surface of the basic holder (1).
8. Tool head according to any of the claims 1-7, **c h a r a c t e r i z e d** in that the side surface of the basic holder (1) is provided with serrations (22) that extend in a direction parallel with the direction of the insert (3).
9. Tool head according to any of the claims 1-7, **c h a r a c t e r i z e d** in that the portion (23) located between the clamp screw (19) and the slot extension (9) of the basic holder (1) has a planar surface without serrations.